Eastern Area Coordination Center

Fuels and Fire Behavior Advisory

Issued April 17, 2010

<u>Subject:</u> Record Dry Fuel Conditions Throughout the <u>Lake States</u> with the Potential for Extreme Fire Behavior.

<u>Discussion:</u> The combined effects of early thawing with short and long-term drying trends throughout the Lake States have resulted in several fire danger indicators exceeding historic levels. Many stations have reached critical fire danger thresholds for multiple indices. Build-Up Indices (CAN), Energy Release Components, 1000 hour fuel Moistures, and stand-out, abnormal precipitation departures all validate the concerns over the early and elevated start to the season in the Lake States.

Heavy fuel loadings, decadent stands, low-based crowns, ladder fuels, flashy fuels, and stands of bug-killed timber will amplify the likelihood of extreme fire behavior as the season progresses. The live fuel moistures and seasonal changes in many species will soon reach their critical stage.

Forecasts indicate an extended drying trend with below normal precipitation continuing through May.

Concerns to Firefighters and the Public:

- Traditional barriers to fire spread will prove to be less effective.
- Mop-up and lingering heat will require greater time, resources, and caution.
- Expect greater intensity and quicker transition into the crowns.
- Expect greater resistance to control at all levels.
- Expect earlier triggers for problem fire behavior.
- Expect the complexity and scope of fires to accelerate more quickly.

Mitigation Measures:

- Stay informed of current conditions, indicators and weather. Obtain a thorough, local briefing.
- Anticipate problem fire behavior and quick changes in complexity.
- Communicate conditions and observed fire behavior; stay tuned in.
- Anticipate the need for quicker, earlier escape routes to substantial safety zones; validate communications with ground and air resources; and know where and what the fire is doing and who is watching out for you and your resources. Continually rehearse these needs.

Area of Concern:

• The Lake States of Minnesota, Wisconsin and Michigan.